

RECORD

all typed

Book 29

Collection and Field Note Book

No. 29

(Feb. 4, 1951 - Sept. 30, 1951)

(33255 - 33606)

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MARYLAND

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- E N D -

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Mar 13 1925 - 10:00



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2

3

Feb. 4 - Makaleha gulch,
Puu Keala, Waianae Mts.
bottom of gulch near
mouth.

Forest in lower part
of gulch bottom is almost
pure *Eugenia cuminii*,
except very near the
mouth, where stands
of *Leucaena glauca* are
common. In the *Eugenia*
forest are numbers of
large *Aleurites moluccana*,
taller than most of the
Eugenia. On the floor of
this forest are abundant
seedlings of *Aleurites*,
none of them much more
than 3-4 dm. tall. Many
of these have the leaves
conspicuously blotched
with yellow! apparently
these do not persist very
long, and their presence
does not indicate any
successional change in
the vegetation.

As one goes up the gulch
seedlings and young
trees of native species,
i.e. *Erythrina*, *Canthium*,
etc. appear.

ridge bet. Middle and East
Falls of East Makaleha gulch
Lower end of ridge
covered by *Eugenia*, *Psidium*,
guajava, *Grevillea*, *Eucal-*
yptus, etc. with *Santana*
in undergrowth.
Nephrolepis hirsutula
and *N. exaltata* common.

Canthium increasingly
common upward. *Styphelia*
occasional, also *Euphorbia*.

Eragrostis grandis
becomes common on ridge
and inhabits open places.
Dodonaea occasional.

Upward, native trees -
Osmanthus, *Metrosideros*, ^{Diospyros}
etc. become dominant, with
Canthium.

Ridge from 1000-1800 feet.

Descending from ridge to
bottom of east branch of
middle falls. The
forest is a mixed
cover of native trees -
canopy largely *Metrosideros*
and *Diospyros*, with
Bobea, *Psychotria*,
Tetraplasandra, *Drackena*,
Santalum, *Osmanthus*, ^{Mysma}, etc.
all occasional to common. A
sapling layer, trees 2-4 cm. diam.

not checked

6

Feb. 4-1951

Labels typed

is quite conspicuous, almost all *Diospyros* *ferruginea*. No *Metrosideros* saplings, few of other genera. No herb or sub-shrub layer. ground quite bare - steep, little soil on base nodular vesicular basalt.

Toward bottom of gulch *Microlepia* becomes common on ground, also *Doodia*. A few *Alectryon* trees and a very few *Drypetes*.

At bottom of gulch, some *Aleurites*, with *Dryopteris* *dentata* (?)

Lower down in gulch

with
L. Hathaway
W. 33255

main mākaleha
Mouth of gulch
Andropogon
one clump seen along
trail in weedy bank

Ridge between east and center forks of east Mākaleha gulch
steep brushy ridge with small trees and openings

2 56 *Drymaria cordata* (L.) Willd.
common in openings on rocks

2 57 *Cladonia*
common in rocky openings

Haw. Is. - Oahu

7

Cantium becomes abundant, *Diospyros* stays ss. Most of the other trees drop out. *Lapindus valuenis* becomes common. *Mezoneuron*, *Colubrina oppositifolia*, and *Reynoldsia* appear.

Canavalia and *Caesalpinia* are common lianes.

Lantana is common, very elongate. The soil is thicker here, at angle of rest between small cliffs. A few ferns.

caespitose, erect

procumbent to ascending, fruiting pedicels caducous, very viscid sticky

not checked 1951 Haw. Is.

8
lades tapped

33258 *Nephrolepis hirsutula*
common in edges of
thicket on ridge

east branch of middle
fork of East Makalaha g.
in forest on steep ^{west} slope
look up
#33258a *Condalia sericea* L.
rare, in dense shade
on rocks with pockets of soil

33259 *Diellia*
occasional in rock
crevices in forest with
some *Lantana*

60 *Alectryon macrocarpus*
occasional locally in forest
near bottom of gulch

61 *Megneria kavaienae* (Mann) Hbd.
occasional in scrubby
forest on ^{steep} slopes near bottom
of gulch

62 *Neraudia*
occasional in dense
scrubby forest with
little undergrowth on
steep slope

63 *Colubrina oppositifolia*
occasional on steep slope
in scrubby forest

64 *Megneria kavaienae* (Mann) Hbd.
same

65 *Vernonia cinerea*
on shaded rocks near
bottom of gulch

Oahu

9

grande ascending,
plane.

pale green, weak

tree 8 m. tall,

slender tree, 4 m. tall,
4 cm. thick, buds purple
(flowers seen on other plant
deep old-rose)

slender shrub 2 m.
tall, stigmas colorless

tree 10 m. tall

slender ~~almost~~ tree with
long branches, 5 m. tall.
flowers white

not checked 1951 Haw. Is.

10

~~Spec. type~~

33266 *Cyperus*

common on soil ~~area~~
Talus near bottom of gulch

Feb. 9 - Flying over W. Molokai
C.R. Wentworth says the
"desert strip" has become less
conspicuous in last few
years - prob. due to efforts
of Molokai Ranch.

~~Volcanic on leeward~~

Feb. 9 - Flying over Lanai
some sediment staining
water reddish of west
end. Large bare areas.
small area of forest
still left, surrounded
by system of wind breaks.

Mountain seems
completely covered by
vegetation, though this
is in places rather thin.
Lennox said all cattle have been removed.

Feb. 9 - Kahoolawe from
air - mostly bare some
vegetation - Prosopis,
some flat areas of
grass, etc.

Feb. 9 Molokini -
practically no vegetation.

Oahu - Lanai - Molokai
Kahoolawe, Maui 11

solitary culms,
spikelets green

Feb. 9 - South coast of
East Maui from air -
several tuff cones on
south slope - oriented
differently than Molokini,
probably because of
influence of land
mass ~~on~~ on wind.

Two fairly recent
lava flows have
little or no vegetation.
except in kipukas.
Whole slope seems
to have very sparse
vegetation.

On West Maui some
ridges are bare and
conspicuously eroded.
The whole West Maui
cone is spectacularly
dissected, as viewed
from air.

Feb. 9 - Hamakua Coast from air.

Kohala section, to is profoundly different from part between this and Waimea - west part relatively smooth, gently sloping almost to sea, where it is slightly cliffed, sticking out into ocean ^{about} farther than cliff section, and covered by sugar cane fields. Kohala mts. part deeply cut by gulches, completely forested, all spurs sharply and perpendicularly truncated a cliffed, all cut cleanly to same distance, the line of cliffs forming a straight line suggesting a fault. The difference between these two sections really more striking than that between Kohala mts. and Mauna Kea lava. Must indicate a difference either in age or character of material.

Coast between Waimea and Kilo all cultivated in cane, up a considerable distance. Then there is a belt of forest, then vast Parker Ranch pastures - these not extending quite to area above Kilo, which is forested. Gulches coming down across this forested coast of low cliffs, much lower than Kohala mts. cliffs, but in equally straight line.

Sea much stained by sediments below place in active cultivation now.

Around Kilo airport forests of almost pure *Pandanus*, quite variable in appearance. *Pluchea odorata* extremely abundant and extremely luxuriant in this region, and for several miles toward Olaa, grows up to 5 m. tall.

Between airport and Olaa a great many exotic trees - *Cecropia*, *Helicopis*, *Ptychosperma*, etc. all very

1951 Hawaii

well developed. Palms especially must be many years old.

Feb. 9 - Around 27 miles
Forests of Metrosideros,
rather uniform in
appearance, with
conspicuous under-
story of Cibotium.

Juliette says Cibotium
being harvested in
large quantities -
trunks being used for
many things - substrate
for orchids, brackets, etc.
Mucilage from stipes
used for "comulsa" -
to make oil sprays
spread more easily.

Feb. 9 - North rim of
Kilauea Crater - uniform
sparse forest of dwarfed (?)
Metrosideros - very
uniform, of a grayish
tint, leaves densely tomentose
beneath. Trees up to 4-5
m. tall. Some *S. polystachys*,
Cyathea species, a few *S. pettibonei*,
Vaccinium, *Cyphoma* species,
Polyphodium pellucidum,
tangles of *Gleichenia*.

linearis var. *tomentosa*
in openings.

Feb. 10 - Thurston Lava Tube,
Kilauea

Wet forest of *Metrosideros*
with prominent lower
layer of *Cibotium*,
invaded by such exotics as
Fuchsia, *Rubus*, *Gibouchina*,
Hypericum japonicum, etc.

73267 *Cibotium hawaiiense*
single plant seen, with
the two commoner species

68 *Hymenophyllum lanceolatum*
occasional, on tree trunks

69 *Polyodium*
occasional, in moss
cushions on tree trunks

70 *Psilotum*
occasional, locally, on
Cibotium trunks

71 *Hydrocotyle sibthorpioides* Lam.
common along rock wall at end of tube

1000 m.
3900'

slender tree 3 m. tall,
appearing to become larger
upward, upper leaf
bases persistent as root
stubs 1-2 dm. long,
pinnules slightly
glaucous beneath,
sub-glossy light
green above.
pods strongly curved downward,
stems stiff, dull green.
stiffly erect

stems horizontal, then
curving downward,
round at base, becoming
compressed, then triangular
below lowest fork,
triangular to second fork,
then flattened; border
conspicuous, rounded,
costa noticeable; surface
dull, stomata (?) noticeable.
prostrate, gray-green.
flowers green.

18

1951 Haw. Is.

rr Feb. 11 - Kipuka Puanuu
(Bird Park), Kilanea
open park-like woodland
with lush grass, deep soil

33272 *Nephrolepis exaltata*
forming large colonies

4. 73 *Myrsine*
common

3. 74 *Gauldia terminalis* var.
rare - one plant seen

3. 75 *Pelea hawaiiensis* (Kawa) var. *gaudichaudii* (St. John) Stone
occasional

4. 76 *Alyxia olivaeformis*
occasional in low thickets

2. 77 *Coprosma*
common

2. 78 *Sophora chrysophylla* Seem.
common second-story tree

3. 79 *Pipturus albidus*
common second-story tree

2. 80 *Psychotria*
abundant, trees mostly young

4. 81 *Myrsine*
common

1300 m.
4200 ft

Hawaii

19

rounds erect, flat.
somewhat indeterminate in growth.
erect tree 10 m. tall,
flowers crimson-pink,
mature fruit black,
stigmas irregular,
of "mace-head" type.
translucent young
growth purple.

shrub 3 m. tall,
diffuse, mature
fruit blue-black,
clusters spherical, compact.

spreading, umbrella-crowned tree, 5 m. tall.
fls greenish, fruit dry.

shrubby vine corolla
tube salmon, lobes greenish
yellow

small slender tree
4 m. tall, flowers green.

slender tree 4 m. tall,
leaves green

low rounded tree 4 m. tall,
ripe receptacles white,
fleshy, fruit ashener green.

small tree 4 m. tall, ripe
fruit yellow.

scrappy tree 6 m. tall,
flowers purple, perianth mostly shed,
stigma translucent, young growth rose.

inf.
fruit
black

20

1951 Hawaii

This bipulka, at present
has an open park-like
appearance, likely due
to the grazing history.
No animals now!

Grass knee-deep, lush,
mostly *Sporobolus elongatus*,
Cynodon dactylon, *Paspalum*
dilatatum, *Anthoxanthus*
odoratum, *Cyperus brevifolius*,
etc.

Colonies of *Rubus pensilvanicus*
some m. broad are common,
up to 1 m tall, tangled,
in full flower, some fruit.

Colonies of *Nephrolepis*
in more shaded areas.

One colony of

" Feb. 11. North rim of Kilauea
Crater, above Military Camp
73282 ² *Bulbostylis capillaris* (L.) C.B.C.
small colony on loose ash

Hawaii

21

Laplings 1-5 m. tall
are locally abundant,
of which most are
Psychotria, ~~etc~~ some
Pipturus, a few *Myrsine*,
some *Coprosma*, *Acacia koa*,
etc. No *lapindus* seedlings
seen.

Mature trees mainly
lapindus, *Metrosideros*,
Acacia, *Myrsine*, etc.

The type tree of *Gouldia*
terminalis var. *antiqua*
f. acuta is dead, trunk
still standing. No other
trees seen.

lapindus is deciduous,
irregularly, a few
trees still green, mostly
bare or fast lossing
yellow leaflets.

1231 m.
4000'

tufts

22

1951 Haw. Is.

Feb. 11 - Road to Kipuka Puanani
1.5 mi. w. of Kilauea Military
Camp

Area of mixed *Styphelia*
and *Dodonaea* scrub
killed back by frost,
quite local, on very gentle
slope, in slight hollow,
scattered *Metrosideros*
trees, these rather ~~small~~,
bare spaces largely
covered by *Cladonia*
(aff. *C. rangiferina*), with
several herbs common
enough, also *Vaccinium*,
one or two young *Metrosideros*
seedlings, partly
killed by frost.

Specimens to illustrate
plants plotted.

33283 *Dodonaea viscosa*

common

84 *Dubautia*
occasional

85 *Cladonia*

abundant on bare spots

on compact ash-soil

85 *Dodonaea viscosa*

common

87 *Digitaria chinensis*

common

88 *Styphelia*

abundant, dominant

Hawaii

23

12:30 a.m.

4:30

laid out a 50 x 50'
plot in this frost-killed

scrub.

inches

and

-

ft.

at

Mixed *Styphelia* and *Dodonaea*
scrub, with scattered small
Metrosideros, on volcanic ash,
on gentle slope (to illustrate *Metrosideros*
of permanent quadrat #1)

11

n. 22

Mixed Styphelia and Dodonaea
scrub, with scattered small
Metrosideros, on volcanic ash
on gentle slope (to illustrate plants
of permanent quadrat #1)

$$\begin{array}{r} 3900 \\ - 4 \\ \hline 38996 \end{array}$$

22

1951 Jan. 15.

11

Feb. 11 - Road to Kipukka Puaulu
1.5 mi. w. of Kilanea Military
Camp

Area of mixed *Styphelia*
and *Dodonaea* scrub
killed back by frost,
quite local, on very gentle
slope, in slight hollow,
scattered *Metrosideros*
trees, these rather ~~small~~
bare spaces largely
covered by *Cladonia*
(aff. *C. rangiferina*), with
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on compact ash-soil

85 *Dodonaea viscosa*

common

87 *Digitaria chinensis*

common

88 *Styphelia*
abundant, dominant

Hawaii

23

1951

15

laid out a 50' x 50'
plot in this frost-killed
area, counted and
located shrubs in
10' x 50' strip and on
diagonal transect,
herbs on 5' x 5' square.

Frost damage apparent
to *Dodonaea*, *Styphelia*, *Vaccinium*
and young *Metrosideros*.
Mostly killed or ground
but sprouting from
roots, but some
apparently killed
outright.

Plot no. # in plot book.

shrub 0.8 m. tall,
- spreading, fruit red.
stiffly erect shrub,
leaves stiff, somewhat
glossy.

shrub 1 m. tall
- fruits red.
spreading tufts

shrub 0.7 m. tall,
fruit purple.

24 1931 Haw. Is.

33289 *Vaccinium*
common
1 90 *Hypochaeris radicata*
common
4 91 *Metrosideros*
common
3 92 *Congza*
very common

xx Feb. 12 - Kilanea Military Camp 1100 m.
Kilanea

disturbed ground around
establishment, compacted soil

3 93 *Andropogon virginicus*
small colony in open
dry or hard ground
3 94 *Lonicera japonica* Thunb.
apparently spontaneous
in edges of thicket

2 95 *Rubus penetans*
common generally,
especially in edges of
thickets.

2 96 *Plantago*
common on bare ~~ash~~
spots on ash soil near camp

Hawaii

25

fruit red
flowers yellow.
erect tree 6 m. tall,
stamens scarlet
erect green with
prominent rosette
at base until anthesis,
flowers white.

caespitose, erect.

woody vine, ~~l~~ veins
not purple, flowers
white, turning yellow,
- ~~do~~ fragrant.
tangled elongate
branching canes;
apparently evergreen,
flowers white, 3 cm.
across; fruit black
and glossy when ripe,
- pleasantly tart.
scapes dead

Feb. 12 - flat east of
Kilauea Military Camp
sparse scrubby woodland
of Metrosideros, with
occasional Santalum.
Open part with low
sparse scrub of Styphelia,
young Metrosideros, Vaccinium
etc. tufts of grass and sedges,
some hädleria, Polypodium,
Lycopodium, Pteridium
(pods mainly killed by frost)
patches of Cladonia and mosses.

33297 Dodonea viscosa

2 occasional

3 98 Cladonia

abundant

2 99 Plantago

rare in sheltered spot

33300 hädleria cyathoides

common

3 01

occasional

3 02 Santalum ellipticum v. paniculatum

occasional

1 03 Vaccinium

very common

1200 m. Permanent quadrat
I.

+

permanent quadrat

I.

These species found
either in or very near
the quadrat.

shrub up to 1 m. tall,
fruits reddish, 3-4 rarely 5-6 in.

spikes dead

trunk 1 m. tall, pods
ascending, pinnae
drooping, young
growth reddish "anaman"
forming cushions

spreading rounded tree
5 m. tall, leaves yellow-green,
glaucous beneath, dull
above, flowers fragrant,
yellow-green without,
maroon within.

dwarf shrub, up to 3 dm. rarely
more tall, flowers vermillion,
fruit orange-red.

28

1951 Haw Is.

37301 1 Cladium angustifolium
common

2 25 Santalum ellipticum v. paniculatum
occasional

2 06 Carex
rare, in shade of trees

2 07 on ground on loose duff

4 08 ~~common~~ epiphytic on tree-trunks
and on debris on ground

3 09 ~~common~~ on tree trunks, dead
branches and duff on ground

2 10 Polypodium pellucidum
very common generally

3 11 Metrosideros
dominant tree

2 12 Styphelia tameiameia
abundant, dominant
in low scrub in openings

13 Lycopodium cernuum
common in openings

14 Pteridium aquilinum
common in openings,
all all ponds seen were
dead, probably from frost

15 Coprosma ernodeoides
common

16 Cyperus brevifolius
rare this plant in ^{top} of tree in humus

Hawaii

29

caespitose, erect,
leaves bright green.
small tree 3 m. tall, leaves
yellow-green, glaucous
beneath, dull above; fruit
immature.

caespitose, culms
spreading-arching,
dark red-brown, green
at edges of colony.

at ponds stiffly
erect, solitary.
erect small tree 2 m.
tall, others much
larger; stamens crimson-
scarlet.

shrub 4 m. tall,
flowers white

creeping shrub; leaves
glossy; all seen were sterile.
heads green

30 1951 Haw. Is.

33317

5 common, forming

7 18 *Thuidium*
common in openings

19 *Hypochaeris radicata*
~~common~~ common in one place

20 *Fragaria*
common in open and
sheltered places,
forming colonies

21 very common in openings

22 common

23 *Gahnia gahniiformis*
common

24 *Aporobolus elongatus*
common

25 *Luzula campestris* var.
occasional

26 *Dubautia*
common, this plant
in *gleichenia* ~~thicket~~
tangle in ~~deep~~ regim
of deep cracks

27 *Wikstroemia*
at foot of cliff, on rocks

Hawaii

31

forming cushion

forming yellow mats.

- is open

- single crest, ligule

- yellow.

fruit white,
pleasantly tart
but with little flavor.

culms and spikes

- purplish

forming clumps,
inflorescences dead

- and shattered

caespitose, small tufts

forming clumps

inflorescences dead.

scrambling, leaves

stiffish, flowers

yellow.

small shrub 1 m. tall,

bark very tough,

flowers yellow, fruit in clusters.

32

1951 Haw. I.

Feb. 12 - Hilo Airport
weedy places
#3328 *Ageratum*
common
Feb. 19 *Pluchea odorata*
very abundant

v

Feb. 14 - south slopes of
Makapuu Pt. along highway
Prosopis forest on rough
broken rock. *Zosyphium*
tormentosum common (seeds
collected to send to Baldwin)

v

Bidens cynapiifolia
common along roadside

Hawaii - Oahu

33

aromatic herb,
flowers lavender
annual shrub & m. tall,
(other larger), rounded
masses; flowers
pale dirty- lavender.

Feb. 23 - road east from Albuquerque going up the slope there is a gradual transition from gray-leaf shrubs to a mixture with *Juniperus*, then pinyon-juniper woodlands then a high point with a mixture of pinyon, *Pinus ponderosa* (at least a longer-leaved pine) and *juniperus* in a fairly well developed but sparse forest. This changes to a grassland with abundant, well-spaced large junipers. Eastward on the plateau this changed gradually to grassland, the junipers becoming smaller and more scarce, then vanishing. Eastward from here they reappeared in rocky situations, hilly places, etc. but never with the luxuriance seen just east of the pine forest.

Feb. 23 - seen from the air, the region east of the Dalton sea, Colorado Mts. etc. has large expanses of completely bare, apparently sandy desert. Dalton sea has abundant water.

Feb. 25 - Beginn

36

37

38

1951 Virginia

" April 1 - Turkey-cock Run

"Magnolia bog" in ravine
cut in quartz gravel,
fed by ~~seepage~~ spring

3331 *Symplocarpus foetidus*
common in saturated
ground

" April 1 - 1 1/4 mi. s. of
Annandale, on Back Lick Run
in sparse beech-oak
forest on mossy earth,
bluff

32 *Epipactis virginiana*
common under *Fagus*

33 *Mitchella repens* L.
common

34 *Anemoneella thalictroides*
occasional on roadside bank

" April 15, + 1 1/2 mi. w. of s. of
Annandale, Back Lick Drainage

second growth mixed
Deciduous forest, mostly
oak and tulip tree, *Illex* sparse
and *Corus florida* in understory

35 *Viola*
sterile road-banks gravel

36 *Viola*
old road in woods

Fairfax Co

39

spathes pale green densely
mottled with purple;
plant very foetid when cut.

dry last year's plant
only green
prostrate leaves dull
green, pale beneath;
- fruit scarlet
fls. leaves dull,
purple-glossy,
flowers pale pinkish

leaves erect, flowers
bright purple.
leaves bluish-green,
flowers bright purple.

37337 *Hedysotis caerulea*
 1 occasional in disturbed
 ground

38 *Goodyera pubescens*
 rare in thin forest

39 *Mitchella repens*
 common in woods

40 *Botrychium dissectum*
 rare in woods

April 20-22 - trip
 to Williamsburg and
 return - observations
 from car. (return by
 Northern Neck via Whitetree)

Cercis canadensis in
 full bloom - common
 on coastal plain, less
 so in Piedmont.

Cornus florida - common
 throughout region -
 flowering time varies
 somewhat between
 individual trees even
 in one locality. On
 Apr. 22 the majority of

definitely perennial,
 last year's stems
 persisting; flowers
 blue-lavender with
 yellow eye.

- leaves grayish,
 veins white.
- prostrate, dull green.
- fruit scarlet.
- stems, bronze-purple

trees on the lower
 end of the Northern
 Neck had bracts
 fully expanded.
 In Fredericksburg
 region perhaps
 half and half
 expanded and still
 yellow. In Piedmont
 very few expanded,
 mostly small and
 yellow.

42

1951. Virginia

April 21, 1 mi. e. of Williamsburg
 on ~~Colonial~~ Parkway, York Co.
 Bridger's *vernum* (L.) T. & G.
~~colony in~~
 open grassy roadside

April 21 - Jollys Pond, 6 mi. n.w.
 of Williamsburg, James City Co.

42 *Asarum virginicum*
 common on steep slope
 in mixed woods
 above pond

43 *Hedystis caerulea* (L.) T. & G. Hook.
 common occasionally
 in open places on bare
 clay soil

April 21 - Powhatan Swamp,
 4 mi. n.w. of Williamsburg,
 James City Co.

44 *Caltha palustris*
 abundant in mud

45 *Trillium pusillum*
 abundant on peaty rocky
 hummocks and banks

York Co. - James City Co. 43

spreading by underground rhizomes,
 rays white

leaves firm, mottled
 with white; flowers
 short cylindrical, neck
 slightly constricted, lobes
 slightly reflexed,
 deep crimson-purple
 without, spotted
 with green within,
 borne under the leaves
 dead leaves on the ground.
 flowers very pale lavender,
 tube greenish, eye yellow.

flowers bright yellow
 rhizomes deeply buried,
 petals white, fading
 to rose purple.

1951 Virginia

44

April 20 - Williamsburg

73346 *Prunus*

cultivated as ornamental

April 22. Gray's Point,
Middlesex Co.

flood plain, silt soil

31. 47 *Luzula bulbosa* (Wood)
common on bare soil
on roadside bank

4 48

local on grassy roadsides

April 23 just s.w. of Whitetons
Lancaster Co.

old fields and roadsides

14 49 *Anthoxanthum odoratum*
roadside

14 50

roadside

51 *Plantago virginica* L.
roadside

14 52 *Cornus florida*
old field, somewhat bushy

13 53 *Cerastium vescoa* L.
abundant on roadside

James City Co. - Lancaster Co. 45

small spreading tree;
leaves glossy; flowers white.

small tufts with
white clustered tubers
at base, perianth dark
brown with paler edges
flowers very pale
blue - lavender

dense tufts

flowers pale blue - lavender

small tree 6 m. tall; bark
white with deep purple
apex, buds unopened.
petals white, plant
ascending.

46

1951 Virginia

vv April 27 - Sleepy Hollow,
1 mi. s. of Falls Church,
e. of Tripper's Run

33354 *Viola papilionacea* f. *albiflora*
abundant locally on
rich bottom land under
trees (descended from
one clump, planted in
1941 or 1942)

vv April 29 - Woodburn Road
Bridge, Accotink Creek,
2 1/2 mi. s. w. of Annandale
mossy bank above creek.

55 *Mitchella repens* L.
abundant, ~~under~~ on

56 *Luzula*
just above stream

57 *Stellaria pubera*
common

58 *Anemoneella thalictroides*
locally abundant

59 *Hedysarum caeruleum*
locally abundant

60 *Luzula*
common

silty flood-plain or
bottom-land, *Betula* forest

61 *Corydalis americanus*
abundant, almost forming
turf, bulbs buried very
deeply in mature plants

Fairfax Co.

47

Common Florida out as
far now here as in
Northern Neck on Apr. 22.
flowers inconspicuous,
bicolor - ~~pink~~ ^{dull} lavender
marginally and dull violet centrally
on petals,
so-called "Confederate violet"
from "blue and gray combination."

80 m.
deciduous forest

flowers white;
leaves dull ~~dark~~ green.
petals pinkish-white;
leaves glaucous.
flowers lavender
with yellowish tube
and eye

leaves not mottled,
green; fruit ovate
obovoid, erect.

48. 1951 Virginia

33162 *Podophyllum peltatum*
forming large colonies

63 *Cardamine*
one small colony seen

64 *Claytonia virginica*
abundant

65 *Ranunculus abortivus*
common

66 *Viola*
occasional

67 *Callitricha*
large masses in a
small tributary, in
gravelly-clay bottom
2-4 dm. deep.

May 5 - 2 mi. s.e. of
Independent Hill, Prince William Co.
edge of small thicket

68 *Rhododendron nudiflorum*
common

49 Fairfax Co. - Prince William Co.

rhizomes buried
horizontal in bud only
erect from moniliform
rhizome; flowers white.
leaves fleshy, tuber
fleshy, buried, flowers
white fading pink
erect petals pale
yellow.

erect, flowers yellow,
~~too~~ a few black lines
on claws of three lower
petals.

broad leaves floating,
shiny, stamens
yellow, above water.

shrub 1 m. tall; leaves
partially developed; flowers
bright pink with red tube,
style reddish, stamens
pinkish-white, odor
strong not especially
unpleasant. (considerable
variation observed in
flower color and time
of anthesis).

May 5 - 3 miles n. e. of
Independent Hill,
in *Pinus virginiana*
woods on red clay soil
33369 *Vaccinium vacillans*
abundant in understory

- 5 70 *Gaylussacia baccata*
abundant in understory
- 5 (71) *Vaccinium stamineum*
common understory
- 73 *Chimaphila umbellata*
local in ~~understory~~
sparse spots in understory
- 74 *Cypripedium acaule*
local in bare ^{spars} spots
in understory
- 75 *Mitchella repens*
occasional in ~~understory~~
open spots in understory
- 76 *Chimaphila maculata*
occasional in open
spots in understory

sparse mixture of younger
trees of deciduous species,
lower story 2-5 dm. tall of
Vaccinium and *Gaylussacia*.
clones very open, leaves
half developed. flowers
pale green flushed with
pink
- shrubs 2-5 dm. tall;
- flowers greenish red.
- shrub 6 dm. tall, leaves
slightly glaucous,
flowers mostly not
at anthesis yet, corolla
white when at full
- anthesis, greenish white then
fair-sized colony, shoots
widely scattered; leaves
glossy green, young
inflorescences pendent.
- tepals deep bronze-purple.
lip pale pink.
prostrate; sterile.

May 6 - Indian River above Shirley Highway,
6 miles west of Alexandria
beech-oak woods on
low alluvial knolls
and along streams

33377 *Fagus grandifolia*
common in wet ground

5 18 Carex

on earth in roots of
fallen tree

79 *Rhododendron nudiflorum*
occasional in sparse woods

80 *Hedysarum caerulea* (L.) T. & G.
common in openings
on sterile ground

81 *Rhododendron nudiflorum*
occasional in sparse woods

5 82 Veronica

one clump on gravel bar
in stream.

83 *Stellaria pubera*

common in sparse woods

84 *Amelanchier arborea*

common in "magnolia bog" along stream

85 Viola

common in wet muddy
gravel of "magnolia bog"

86 *Arisaema triphyllum* var.

common in low ground

small "magnolia bog"
with just a bit of
Sphagnum, wet
soil, partly gravel,

tree 5' ft. tall, fallen
but still alive (possibly
flowering early).
caespitose

shrub 0.7 m. tall, flower
pink with red tube
tufts; corolla limb
lavender, tube and eye
yellow

shrub 0.6 m. tall; flower
very pale pink with
red tube; little fragrance.
depressed, caespitose.

corolla whitish with
purple lines,rotate-campanulate,
caespitose, flowers
white, petals deeply lipped.
shrub 4 m. tall, fruit
immature.

erect, flowers bright
violet.

spathe green with
white stripes, flap grey
(all seen the same)

54 1951 Virginia

33387 *Chrysosplenium*

on surface of water
and ground in "magnolia bog"

88 *Cardamine bulbosa*
in wet low ground, common

89 *Epifagus virginiana*
common under beech

Fairfax Co.

55

prostrate; stems
bronze-red.

erect, flowers white;
rhizome white
plants dry. from last year.

May 12, 1951 Virginia

56

May 12 - Elk Wallow, Page Co.

former clearing, now
filled with Robinia

33390 *Chelidonium majus*

12 occasional

91 ~~Viola~~

91 *Viola*

common

92 *Viola kitaibadiana* var. *rafinesquei*
common

2 93 *Corydalis flavescens*
abundant

May 12, ^{near} Old Rag Post Office
site, Madison Co.

second-growth woods
of rather small trees.

3 94 *Rosa*
around old farm site,
brushy opening

4 95 *Vaccinium vacillans*
in woods on slope

2 96 *Prunus* [Discarded; demolished by insects]
abundant in brushy
opening around old farm site.

13 97 *Salix*
seen in brushy opening

SPB

Shenandoah Nat. Park

57

roots orange, leaves
light green, glaucous
beneath; flowers bright yellow
flowers bright violet

flowers pale blue-lavender,
stems lined in center
with purple.
flowers yellow

bos. in

sprawling bush, flowers
dull pink.

single compact clump,
leaves pale green, flowers
greenish rose color.

loosely branching
shrub, petals already fallen.
short 2 m. tall.

58 1951 Virginia

May 12. - Weakly Hollow Road
above Nethers, Madison Co.
old house site in
second-growth woods.

33398 ~~Lilium~~ ^{Lilium} ~~lilacinum~~ ^{lilacinum}
at base of shrubs, roadside

3 99 *Lysimachia vulgaris*
in small opening

33400 *Buxus sempervirens*
in small opening

1 01 *Orchis spectabilis*
in forest on rocky bottom of hollow

May 12. - Weakly Hollows

Road Ford, above Nethers, Madison Co.

02 *Saxifraga micranthidifolia* (Haw.) Britt.
wet ground near stream

03 *Ranunculus*
in road on wet ground

04 *Hedysarum caeruleum* (L.) Hook.
common on low ground in
woods near stream

May 12. - Nethers, Madison Co.

~~33402~~ roadside

33405 *Hedysarum purpurea* (L.) T. & G.
3 occasional

06 *Krigia virginica*
common

07 *Viola cucullata* Ait.
rare

500 m.

Shenandoah National Park 59

flowers violet

— shrub 4 m. tall;

— fls lila, fragrant

— shrub, m. tall,

— fruit immature

flowers pale violet, lip and
spur white

340 m.

with yellow spot.

flowers white, anthers

— bright orange.

flowers ^{light} yellow

flowers blue-lavender,
with yellow eye and tub.

300 m.

crest, flowers rose-purple

crest

fl leaves glaucous green,
veins purple; flowers
bright purple.

May 4 - Old Rag saddle,
trail from Post office site toLean +
thin second-growth
woods of small trees
benecis aureus L.

33408 1 common in small openings,
2 (9) 2 *Antennaria plantaginifolia*
3 (10) common in sparse wood
4 (11) *Tsuga canadensis*
occasional.
5 (12) *Vinca minor*
great colony in sparse woods
6 (13) *Lycopodium complanatum*
small colony in woods
7 (14) *Fragaria*
common in thin woods

May 13 - Big Meadows camp ground
Mixed woods, mainly
oaks and *Pinus strobus*,
the oaks scarcely beginning
to leaf out.

8 (15) *Viola papilionacea* Pursh
9 (16) common in camp ground
under trees
10 (16a) *Viola palmata* (possibly *x* *V. papilionacea*)
11 (17) *Viola palmata x papilionacea*
12 (17) *Ranunculus abortivus* L.?
13 (18) *Ranunculus*
occasional in camp ground
under trees

Madison Co.

625 m. flowers deep orange-yellow.
.. "staminate - "pistillate
.. small sterile trees.
.. other larger ones seen.
600 m. forming a continuous
mat over ground.
flowers blue-violet.
prostrate, rhizome
above ground, sterile
scapes erect, petals white

Many pines in meadow with ~
dead twigs and branches, some indeed
dead altogether. No obvious cause -
probably fungus disease. In one case
small beetles (Bostrychidae) burrowing in
leaves blue green, flowers
bright violet with
whitish center, with dark
veins, wings strongly
bearded
petals yellow.

11 May 13. Big Meadows - rolling meadow across from gas station.

Open, covered with grass, ^{Antennaria, Tragopogon, etc.} Carex, Viola, Tragopogon, Achillea, Senecio, etc. Large patches of Polytrichum. Being invaded by several species of Rubus, Crataegus, Corylus, scattered Junipers (with dead branchlets as in pines), Robinia, Ribes, one patch of Prunus virginiana, etc.

On top of a knoll are a

33419 Ribes

invading open rolling meadowland

20 Anemone quinquefolia var. lancifolia?
local in low marshy place in meadow but above actually muddy ground

21 Carex
abundant in meadow or gently sloping ground

Ranger say pine blight appeared a year or two ago, that no one seems to know what causes it.

number of tiny Abies, planted by park service, I suppose. A broad low place, draining imperfectly over east edge, is marshy, with open mossy meadow, patches of Sphagnum, anemone quite common. No standing water but definitely wet ground. Many of plants in meadow form large colonies by underground rhizomes.

stiff shrub 0.8 m. tall; flowers green

rhizome white, + brownish, outside, buried 3-5 cm., outer surface of tepals pink to purplish, inside white. calms solitary.

64 1951 Virginia

May 13 - 1/2 mi. s. of Beakins Gap
on Skyline Drive
sparse wood on gentle w. slope

33400 May 13 - Crescent Rocks, Page Co. 1075 m. 33422 *Anemone quinquefolia* v. *lancifolia* (Lindb.) Torr. very common on rocky flats

23 *Arabis laevigata*
occasional on ~~terrac~~ talus
at foot of cliffs above road

May 13 - 1/2 mi. s. of Beakins Gap
on Skyline Drive, Page Co.

sparse wood on gentle s.w. slope

24 *Vicia caroliniana* Walt.
common on steep road cuts
and in woods

25 *Antennaria virginiana* Arg. common in sparse wood

26 *Antennaria*
common in sparse woods

27 *Festuca ovina* L.
dominant grass on dry
steep road cut-banks

May 13 - On and near upper (Sh. D.)
end of trail to The Neighbor, Page

28 *Saxifrage*
common on steep road cuts

65 Shenandoah Nat. Park

Clumps of *Clintonia* above dry rock cliff
rhizome white, buried
3-5 cm., flowers white
barely pinkish without.
somewhat glaucous;
petals white, sepals
purple tipped, flowers
nodding.

2545
770 m.
slope

weakly ascending,
flowers dull lavender.

colonies scattered, not
forming dense mats.

colonies scattered,
not forming dense mats.
dense tufts, leaves wiry.

770 m.
Co.

leaves red-purple beneath,
purple margined; petals
white, disk gland purple,
filaments subulate, young
follicles red.

33429 *Epigaea repens*

common locally on slope
in *Quercus ilicifolia* scrub
slope burned about 1917

30 *Barbarea vulgaris* R.B. var. ^{read (0913) this} *repens*
occasional on roadside

31 *Rhododendron roseum* (Loisel.) Rehd.
occasional in *Quercus*
ilicifolia scrub on slope

32 *Iris versicolor* var. *smalliana* Tern.
occasional in *Quercus*
ilicifolia scrub on slope

33 *Rhododendron roseum* (Loisel.) Rehd.
occasional in woods
on steep slope

34 *Betula*
rare in woods on steep
slope (said to be a small
patch some distance away)

May 13 - ~~Blayline Drive at~~
Mt. Marshall Fire Road
near Blayline Drive, Rappahannock Co.

35 *Sambucus racemosa* var. ^(pubens) *pubens*
occasional in forest on
steep slope

g. ostrate

flowers bright yellow.

shrub 1.5 m. tall; flowers
bright pink, tube almost
red, somewhat clove-scented
but also slightly strawberry od.

flowers violet with
orange patch at base
of limb of sepal and
extending down claw, this
with veiny whitish margin.

shrub 2 m. tall, flower
bright pink with
red tube; fragrant
with somewhat clove od.
small tree 4 cm. diam. ^{5 in.}
trunk white, branches
red-brown.

770 m.

shrub 2 m. tall,
flowers white in
clusters longer than wide

May 12 - 1 mi. w. of
Rappahannock River,
7 mi. n. of Jeffersonton
Culpepper Co.

grassy roadside at edge of woods

33430 *Krigia virginica*
common

37 *Myosotis*
common

flowers orange.

flowers white.

May 27 - Sutland Bog
Chimanthus, *Ilex* var. *damascena*,
Gaylussacia dumosa, *G. frondosa*,
 all in bloom. *Utricularia*
 blooming abundantly.
Drosera not in bloom.
Erica only vegetative.

Wet white gravel with
 patches of *Sphagnum*
 and shrubs, low thickets

33438 39 *Amelanchier*
 in thickets, common,
 1 39 *Utricularia gibba*?
 common in open spots in moss
 3 40 rare in thickets
 3 41 *Gaylussacia frondosa*
 common in edges of
 thickets and on *Sphagnum*
 patches
 1 42 *Ilex*
 occasional in thickets
 and on *Sphagnum* patches.
 3 43 *Gaylussacia* ~~frondosa~~ *dumosa*
 abundant in *Sphagnum* patches
 44 *Chimanthus virginiana*
 occasional in thickets

shrub 3 m. tall,
 - fruit immature.
 flowers yellow, leaves
 prostrate on wet soil.
 shrub 2 m. tall,
 flowers white, corolla
 pointing downward.
 shrub 0.8 m. tall (other
 taller), glaucous
 beneath, flowers
 reddish green.
 shrub 1.5 m. tall, leaves
 glossy, flowers white.
 erect shrubs from
 rhizomes buried in
Sphagnum about 2-4 dm. tall,
 flowers white.
 flowers white, fragrant.
 shrub 3 m. tall.

May 27 - Morningside

rich bottom-land forest,
largely *Liriodendron*, *Fagus*,
Quercus, etc. many large
trees, dense shade with
little or no underbrush,
Dennstaedtia, *Medeola*, *Luzula*,
etc., forming an uneven
and incomplete herbaceous
ground cover.

33445 *Convallaria majalis*
14 growing from under log

15 46 *Isopyrum thalictroides*
common in open disturbed
places at edge of forest

17 47 *Luzula*
common in woods

12 48 common in woods

13 49 *Medeola virginiana*
common in woods
about bases of trees

34 50 *Euonymus*
common under trees

51 *Fagus grandifolia*
one of dominant trees

no *Spifagus* seen,
though it was looked
for under beeches.

flowers cream color
large spreading
clumps, flowers light
lavender-violet.
culms ascending
rhizome white, well
curred, fruit immature,
- sharply 3-angled
slipper white, bearded,
tepal pale green, anthers
orange, styles purplish.
weak green shrub,
sterile to short
prostrate, fertile erect,
1 m. tall, flowers
yellow-green, flat.
tree 2.5 m. tall, 5 dm. thick,
bark smooth, gray.

74 1951 Maryland

33452 *Panax*

very rare in forest, only seen,

11 53 *Hedystis caerulea* L. (Huds.)
occasional in forest

June 3 - Head of Broad Creek,
South River
weedy old field, sterile
eroded ground.

11 54 *Thlaspi arvense* L.
common

11 55 *Veronica arvensis* L.
common

13 56 *Valerianella locusta* (L.) Betschke.
local

Prince Georges Co.
Anne Arundel Co.

75

see flowers dull white.

flowers pale lavender,
tube yellowish.

erect; flowers white

erect; flowers pale
lavender.

plants pale, flowers
bluish white, mostly
past.

June 18 Sleepy Hollow,
 1 1/2 mi. s. of Falls Church,
 around abandoned old
 home-site in grove of
 trees in pasture

33457 *Erigeron strigosum*
 common in ^{weedy} openings

✓ 3 58 *Rosa*
 large flourishing colony

✓ 3 59 *Rubus occidentalis*
 common in shade of
 trees and or edges of thickets

✓ 6 60 *Tilia europaea* L.
 one tree

July 1 ~~south~~ s.w. of Burke,
 3 1/2 mi. s.s.e. of Fairfax
 roadside banks and
 thickets, patches of woods

✓ 2 61 *Asclepias purpurascens* L.
 common locally on roadside banks
 gregarious

✓ 1 62 *Medicago sativa* L.
 occasional on edge of old field

✓ 5 63 *Orobanchus minor* L.
 common in edge of old
 field, on weeds or clover

✓ 11 64 *Erigeron strigosus* var. *beyrichii* (T.)
 common in old weedy field

rays white

climbing, forming tangles

primocanes erect,
 floricanes depressed,
 canes glaucous, leaves
 white beneath, fruit
 black when ripe, sweet,
 of good flavor.

large well formed
 tree, probably persisting
 from planting

100 m.

✓ 1.2 erect herb ~~2~~ m. tall,
 flowers blue-violet.

erect, dry.

✓ 1.2 m. 7.9. rays white.

78 1951 Virginia

33465 *Dryopteris hexagonoptera* (Michx.) C. Chr.
common in oak woods
on quartz knob

66 *Luzula*
occasional in dense oak woods

67 *Cornus florida* L.
common in woods,
forming second layer

68 *Rubus occidentalis* L.
common in wet ground
along road. ~~at edge of woods~~

69 *Lysimachia ciliata*
common in wet ground along road

70 *Geum canadense* L.
rare in wet ground along road

71 *Stachys*
common in wet ground
along road

72 *Silene antirrhina* f. *deaneana*
rare in edge of wheat field

73 *Thalictrum polypogon* Muhl.
local in wet ground

74 *Lobelia spicata* var. *scoposa* Muhl.
occasional on ~~the~~ roadside bank

75 *Vaccinium vacillans* Torr.
occasional on high roadside bank

76 *Gaultheria procumbens*
occasional on high roadside bank

77 *Hedysarum purpureum* var. *purpureum*

Fairfax Co.

79

culms weak, procumbent
small tree 5 m. tall,
fruit immature

primocanes erect,
glaucous, glaucous
low, with erect branches,
fruit black when ripe.

erect flowers bright
yellow, with slight
reddish spots in center.

erect, petals white.

erect, harsh; flowers
magenta-pink.

tips of calyx purple.

herbs 2 m. tall;
stamens white.

leaves glaucous beneath

low shrub 4 dm. tall,
stems green, fruit glaucous.

low shrub 4 dm. tall,
fruit black.

fruit immature

80 1951 Virginia

33479 *Vaccinium stamineum* L.
occasional on high roadside bank
in open.

(1) 79 *Castanea pumila* (L.) Mill.
occasional ~~at~~ edges of
thickets along road.

15 80 *Vitis labrusca* L.
climbing down roadside bank

15 81 *Quercus stellata*
isolated tree in
edge of field

13 82 *Galium pilosum*
under large tree in
edge of field.

12 83 *Castanea pumila* (L.) Mill.
~~shrub~~ in brushy
place along road.

July 15 - Lee Blvd. 2. of
Falls Church

84 *Orobanchus minor* L.
in weedy old field with
grasses, *Lonicera japonica*,
and *solidago*

July 21 - 1 1/4 mi. S. of Annandale
on Back Lick Run

85 *Elaeagnus umbellata* ~~Thunb.~~
common in edges of
woods and fields, roadsides

Fairfax Co.

81

shrub; leaves glaucous
beneath, fruit green,
glaucous, immature.
shrub 1.5 m. tall,
leaves grayish beneath,
vine, climbing on
bushes, fruit immature.
spreading tree
with rounded
crown, wide spreading
drooping branches;
leaves dark green,
glossy above, glaucous
beneath.
roots yellow, flowers
red.

shrub 1 m. tall.

perfectly dry

shrub, m. tall (others
up to 2 1/2 m., twigs
rusty, leaves silvery beneath,
green above, fruit immature).

82 1951 Virginia

July 21 - Indian Run
above Shirley Highway
oak-beech woods
in hollow along stream

33486 *Erelia inflata*
common in disturbed spots

13 87

occasional in wet ground

13 88 *Lactuca*
rare in ~~the~~ disturbed
places

15 89 *Phlox paniculata* L.
~~occurred~~ colony in
wet disturbed place

July 21 1 1/2 mi. s.s.e. of
Annandale

roadside bank at
edge of woods, sandy
loam soil, Ericaceous
abundant

1 90 *Linum intercicum* Bickn.
occasional ~~in~~ in
Vaccinium - Gaylussacia
ground cover

15 91 *Polygonatum biflorum* (Walt.) Ell.
occasional in Vaccinium
Gaylussacia ground cover.

Fairfax Co.

83

erect, fls 1-8 dm. tall,
flowers very pale
lavender.

erect, leaves slightly
glaucous beneath,
flowers yellow.
herbs $\frac{1}{2}$ - $\frac{17}{17}$ m. tall,
flowers rose-purple

erect from branched
fleshy white rhizome.
this horizontal and
buried 2-4 cm.,
fruit green, pendent,
spherical, fleshy.

84 1951 Virginia

Aug. 12 - 3 mi. n. n.e. of
Manassas, s. of Bull Run
weedy roadside places
around edge of patch
of pine woods

33492 *Asclepias*
rare at edge of woods
93 *Prunella vulgaris* L.
common in weedy place
94 *Apocynum cannabinum* L.
rare in weedy place
95 *Asclepias verticillata*
rare in weedy place
96 *Liatris*
common in weedy place
97 *Solidago*
rare in edge of forest
98 *Asclepias incarnata* v. *pulchra*
(Roth.) Pers.
rare in wet weedy place
99 *Stylosanthes*
common at edge of forest

Aug. 12 - Broad Run, 1 mi. n.
of Pinetown, 4 mi. s. of n. of
Manassas
narrow woods along stream
banks, and low bluffs of purple trisitic shale

33500 *Rennia setaria*
small colony along roadside
01 *Setaria*
common along roadside
02 *Polygonum*
common along roadside

Prince William Co.

85

flowers light green
flowers light purple
erect, leaves ascending,
fruit pointing downward
flowers white, perianth
slightly bronze toward
tips.
stems erect, flowers
brilliant magenta
flowers yellow
herb 0.8 dm. tall; flowers
dull rose-pink.

erect, spike arcuate,
green
spike erect, green
tangled herb; flowers
pink.

Wednesday
86 1951 Virginia

73503 *Polygonum punctatum*
15 weedy roadside in
wet ditch

16

17 04 *Corylus* ~~sp~~
weedy roadside

18 05 *Rhus aromatica* Ait.
rocky top of ~~streambank~~

19 06 *Carya*
edge of woods

20 07 *Celtis occidentalis*
common in understory of woods

21 08 *Geum canadense*
common in dense shade

22 09 *Campsis radicans*
climbing over low rocky bluff

23 10 *Lechea Leggetti*
rare on ~~the~~ eroded ~~weedy~~
weedy roadside

24 11 *Lechea minor*
common on eroded
weedy roadside

25 12 *Clytineus*
common in woods in shade

Prince William Co.

87

erect, weedy, glistering
extremely variable in
stature

tangled much-branched
herb, flowers white.

erect, heads white;
stature extremely variable
subscandent shrub,

tangled.

small tree, fruit
immature

small tree 4 m. tall; sterile
stems ascending

extensive vine; corollae
orange to vermillion
rosettes dried up;
capsules red brown.

rosettes dried up;
capsules red-brown.

erect or almost so,
not caespitose.

Aug. 19 - Accotink Creek,
just above crossing of
Shirley Highway, $1\frac{1}{4}$ mi.
n. n. w. of Phicks
mixed deciduous woods

33513 *Cyperus*
in wet pebbly bed of stream

14 *Mimulus*?
in wet edge of stream

15 *Mimulus ringens*
occasional on weedy
margin of gravel bar
banks of stream

16 *Panicum*
common along stream bank

17 *Prunella vulgaris* L.
common on weedy slope just
above stream

18 *Phlox paniculata* L.
rare on weedy slope just
above stream

19 *Rudbeckia laciniata*
occasional on weedy slope
just above stream

20 *Lobelia cardinalis*
rare on stream bank

21
common on stream bank

22 *Leersia*
common on roadside

23 *Buddleia*
one plant on roadside

spikelets greenish-yellow
erect, basal off part of
stem thickened, ^{not} winged,
strongly angled,
corolla purple with
yellow palate, throat funnel-^{boat} shaped,
erect corolla purple
with yellow palate

flowers purple,
lower lip pale.

erect; flowers magenta

erect, stem glaucous;
ditch green; rays yellow.
flowers bright red.

weakly erect, panicle
drooping
culms weakly ascending.
Fragrant shrub 1.3 m. tall,
flowers purple, strongly honey-scented

90 1951 Virginia

Aug. 19, f - Shirley Highway
1 3/4 mi. s. of Garfield
deciduous forest on
creek-bottom-land,
partially flooded at times

33524 23 *Polystichum acrostichoides* (Michx.) Schott
occasional, just above flood level

24 25 *Galium pilosum* triflorum Michx.
common on forest floor

26 *Tipularia discolor* (Pursh) Nutt.
rare on forest floor

27 *Galium pilosum* Ait.
on forest floor

28 *Lycopus uniflorus* Michx.
common on ground that
is occasionally flooded

29 *Dryopteris noveboracensis* (L.) Gray
growing on mossy hummock
in sometimes flooded
bottom land

30 *Hieracium scabrum* Michx.
occasional on ^{weedy} highway embankment

31 ~~is~~ *Lobelia inflata*
occasional on weedy highway
embankment

32 *Apis americana* Michx.
weedy highway embankment

33 *Cassia fasciculata* Michx.
common on weedy roadside

Fairfax Co.

91

(Michx.) Schott ponds ascending.

procumbent; roots
yellow, turning dull
red on drying.
- tubers dorsoventrally flattened;
stem and flowers
bronze; leaves none at this time.
stem procumbent.

erect, leaves dull green,
flowers white, corolla
lobes slightly flaring;
rhizome only slightly thickened.
roots strongly
ascending; rhizome
shallowly buried, brown
but pale at tips.

erect; rays yellow.

erect; flowers pale lavender

twining over bushes; flowers
purpleish brown.

leaves closing soon
after picking; flowers
bright yellow.

Aug. 25. Trip from Falls Church,
via Centerville, Manassas,
Mokesville, Catlett, to
Morristown. - General
observations.

A few inner leaves of
Liriodendron are yellow.

Cornus florida in
exposed places just
beginning to get a
bronze-purple tinge.

In exposed and only
moderately sheltered
places the leaves now
hang vertically, with
a tendency to curl.

In low moist spots
with deep shade
they are divergent as
earlier in season.

Nyssa sylvatica - some
leaves turning bright red.

Rhus copallina - some
leaves turning red.

Fruit red-purple.

Juglans nigra(?) beginning
to lose leaflets.

94

1951

Virginia

Aug. 25 - Kettle Run, $\frac{1}{4}$ mi.
~~2 mi. n.~~ of Nokesville, $1\frac{1}{2}$ mi.
 w. s. w. of Manassas
 roadside

33534 *Hypericum*
 5 in ditch by road, occasional

2 35 *Arthraxon hispidum*
 abundant in roadside ditch

5 36 *Viburnum prunifolium*
 small colony on roadside
 bank in full sun.

5 37 *Commelinia*
 common in dry roadside ditch

200'

Pusey William Co.
 Fangoria Co.

95

shrub 0.8 m. tall,
 flowers yellow, stamens
 numerous; fruit immature,
 forming low tangled
 masses, sterile.

shrub 1.5 m. tall, leaves
 bronze, fruit pale
 green, pendent.

decumbent to ascending,
 flowers bluish faded
 at 5:30 p.m.

Aug. 25 - $\frac{1}{4}$ mi. n. of Morrisville,
 $3\frac{1}{2}$ mi. e. of Culpepper,
 thin oak woods with
 very little undergrowth,
 on very slight slope

400'

182 m.

1 38 *Verbena scabra*
 in weedy cleared ground

4 39 *Hedemora prulegioides*
 common in weedy cleared ground

2 40 *Viburnum acerifolium*
 rare in forest

1 41 *Mitchella repens*
 occasional in forest

1 42 *Monotropa uniflora*
 rare in forest

erect, flowers white.

plant with very
 strong pennyroyal odor;
 flowers lavender.

shrub 1 m. tall;

fruit purple-black.

prostrate, forming
 a thin mat, fruit
 bronze green.

white leaves turning
 black.

96 1951 Virginia

33543 ~~Acadian~~ *Glaucomia*

12 *Aureolaria*

occasional in

11 44 ~~Geost~~ *Polystichum acrostichoides*:
rare in shallow stream
ravine with patches of
sphagnum

12 45 *Dryopteris noveboracensis* (L.) Gray
occasional, especially
in damp depressions.

13 46 *Desmodium*
scattered but common
in woods

Fauquier Co.

97

sterile fronds depressed,
fertile ~~seed~~ ascending

leafy and flowering
stems erect, emerging
from duff layer separately;
flowers bright lavender.

Aug. 31 Blue Ridge Parkway
3 mi. east of Deep Gap
rolling meadows
surrounded by scrubby
second-growth, with
scattered saplings

37547 *Polygala sanguinea* L.
common in sandy
part of meadow

4 48 *Desmodium*
occasional on thin soil
on schistose rocks

7 49 *Lycopodium unifolium* Michx.
local colony in semi-shade

6 50 *Euphorbia corollata* L.
scattered in meadow

4 51 *Cacalia atriplicifolia*
scattered in meadow

5 52 *Vaccinium*
occasional in edge of woods

5 53 *Ilex laevigata* (Pursh) Gray
occasional ⁱⁿ edge of woods

3700'

1125 heads rose-purple
at top, whitish below.
roots with strong
wintergreen odor.
- wingately branched
herb ^{up to} 0.8 m. tall.
- flowers lavender
erect, stolons delicate,
horizontal, rarely
tuberiferous; corolla
white, lobes flaring.
- erect from deep ~~rooted~~
erect rootstock;
appendages white.
- erect, leaves very glaucous
beneath; flowers white.
- shrub, m. tall; leaves
white beneath; fruit
green, subglobose.
- shrub 1.5 m. tall; fruit
immature.

100 1951 North Carolina

Aug. 31 - Big Pine Creek,
on Blue Ridge Parkway n.e. of
Roaring Gap
~~temperate~~ broad-leaved
forest, mostly oak

33554 *Xanthorhiza simplicissima* Marsh
common on creek-bank
3 1/5 55 *Clethra acuminata* Michx.
overhanging creek bank
1/2 56 *Smilacina vulgaris*
common along roadside
4 1/2 57 *Rubus*
common on floor of ~~sparsely~~
part of woods
6 58 *Viburnum*
occasional in woods
1/2 59 *Spiranthes gracilis* (Bigel.) Beck
occasional, grassy roadside

Wilkes Co.

~~2000'~~
2000'
600'

low shrub, sparingly
branched, fruit immature
shrub 1.5 m. tall;
- spikes pale.
- flowers purple

prostrate, fruiting
branches erect; fruit black.

shrub 2 m. tall, fruits
immature.
erect, flowers white.

102 1951 Virginia

Aug. 31 - Rocky Knob Park,

Blue Ridge Parkway

in ~~rocky~~ dry oak woods on broken

63 61 Hedysarum purpureum

common in rocky ground

65 61 Hieracium

common on rocky ground

63 62 Campanula divaricata Michx.

occasional in rocky ground

63 63 Aster divaricatis L.

dominant in ground cover
in woods on rocky ground

Sept. 1 - Rocky Knob, Blue
Ridge Parkway

dry oak woods on slopes
of broken mica schist.

64 Kalmia latifolia L.

locally dominant in
undergrowth

65 Menziesia pilosa (Michx.) Presl

locally dominant in
undergrowth

66 Convallaria montana Raf.

common locally

67 Solidago bicolor

common at top of knob

68 Polypodium vulgare var. vitinianum

common on rocks at top of
knob

Floyd Co.-Patrick Co.
boundary 103

mica schist.

caespitose, no rosette; flower
pale lavender, mostly gone.
- erect, flowers yellow.

fls. blue-violet.

erect, rays white.

shrub 1.5 m. tall
fruit immature

shrub 1 m. tall
fruit immature

scattered plants, leaves
turning yellow; fls
fruited raceme secund,
fruits red, fleshy, globose.
- pendent.

flowers white.

forming mat on
rocks.

104 1951 Virginia

33569 70 *Galax aspifylla* L.
common locally on
mossy shrubby banks
under trees

70 *Monotropa hypopithys* L.
rare, on open mossy bank

71 *Orobanche ramosa* L.
very rare on slope in
forest, little undergrowth
or ground-cover:

72 *Aureolaria*
occasional on wooded
slope

73 *Penstemon*
common on wooded slope.

74 *Galium latifolium* Michx.
common on wooded slopes

75 *Polygonatum canaliculatum* (Muhl.) Pursh.
occasional, local on slopes

76 *Aster divaricatus*
dominant in ground cover
in forest.

77 *Sedum*
abundant

78 *Hedysotis purpurea*
common, esp. along trail

Sept. 2 Rocky Knob Park

79 *Conopholis americana* (L.) Wallr.
in oak forest on the moist
undercrop

Floyd Co.-Patrick Co. boundary 105

rhizome prostrate,
plants colonial; leaves
glossy, scape erect.
plant ~~yellowish~~.

plant ~~erect, orange-color~~ orange-pink

caespitose, stems
ascending; flowers bright
yellow.
stems erect.
- caespitose
rhizome thick, constricted,
horizontal, branched, buried
rhizome ~~white~~, horizontal,
rays white, disk reddish.
petals slightly glaucous,
appressed close to ground,
dead scapes erect.
extremely variable in
stature and leaf outline.
flowers pale lavender.

small clumps,
already dead
and dry.

Forest on ridges of
mica schist is
largely a mixture of
oaks, *Q. rubra*, *Q. ~~binus~~ pinus*,
Q. velutina (?), *Q. alba*, etc.
with some *Betula lenta*,
occasional *Carrya*.

The stature of this forest
is rather low, lower
on ridges than slopes.

The ground cover is, in
places, pure *Aster divaricatus*,
here and there varied
by galax, scattered
Solidago, *Convallaria*,
Campanula divaricata,
Galium latifolium, *Hedysarum*
purpurea (common along
trails but present away from
them), and with ~~extensive~~
moss-covered places. Shrub
layer mainly of *Kalmia*
and *Menziesia*, about
1.5-3 m. high.

Ferns rather scarce.

At this time the forest appears
rather dry. On ridges the
herbs have a rather wilted
appearance.

In old fields the
invading tree is either
Betula lenta or *Robinia*
pseudo-acacia.

Ridge top varies from open cleared meadow largely mowed for hay, to oak forest with very conspicuous under brush of Ericaceous - Rhododendron, Kalmia, etc., to mixed oak + hemlock or pine forest. *Pinus strobus* is very prominent, mostly young, stands rather even aged. Probably extensively planted in reforestation.

Meadows being invaded by locust and white pine.

Slopes mainly more wooded than tops of ridges.

110 1951 Virginia

Sept. 10 - Sleepy Hollow,
1/2 mi. s. of Falls Church
33580 Buddleia
single plant along roadside

Sept. 23 Phicks Creek, 2 mi.
s.w. of Phicks, 10 mi. s.e. of
Alexandria

mixed hardwood forest
on light colored clay soil

81 *Hydrangea arborescens*
roadside thicket

82 *Monotropa uniflora*
in layer of dead leaves

83 *Chimaphila maculata*
common on floor of forest

84 *Platanus occidentalis* L.
occasional along creek

85 *Chimaphila umbellata*
occasional on floor of forest

86 *Elephantopus caroliniana*
roadside in weedy clearing

87 *Monotropa hypopitys* var.
large colony on forest
floor in ^{place} fairly often free
of undergrowth

Fairfax Co.

111

shrub 2 m. tall,
flowers bright purple,
with strong honey od.

30-50 m.

Quercus spp., *Acer*, *Carya*,
- *Tagus*, *Cornus*, etc.
weak shrub 1.5 m.
- tall.

dry, dead, naked brown

leaves variegated

tree 10 m. tall, crown
rounded.

small open colonies;
leaves glossy green; all
plants seen sterile.

~~Wilted~~ herb, up to 0.8 m. tall.

single or in small
clumps, stems and
base of flowers coral-
vermillion, flowers
yellow distally, odorless;
root, very fine,
embedded in masses
of mycelium-filled
gray soil and humus.

not checked 1951 Virginia

112

Alnus serrulata Willd.
on creek bank at
edge of water

89

Tipularia
on rocky side of ravine

90 Epifagus virginiana (L.) Bart.
under beech trees on
side of ravine.

91 Fagus grandifolia
common in forest

92 Polypodium vulgare var.
common on rocky side of ravine

93 Liatris

small colony along roadside

94 Aronia arbutifolia
occasional along roadside

95 Euonymus americanus
common in edges of woods

96 Oenothera fruticosa
on roadside bank, local.

97 Linum virginianum L.
occasional on roadside bank

Fairfax Co.

113

shrub 2-3 m. tall.

rhizome gray,
plant and fruit dark
purple, bronze.
plant bronze with
purple stripes, flowers
purple striped.
tree 15 m. tall with
gray smooth trunk,
~~stele~~ twigs brown.

virginianum. rhizome only slightly
sweetish, slightly aromatic.
flowers brilliant
purple.

shrub 1.5 m. tall,
ripe fruit scarlet.
woody shrub 1-1.5 m. tall,
stems green, fruits
rose purple, seeds
scarlet.

procumbent
erect, flowers yellow.

Nov 1951 Virginia

114

Sept. 27 - Sleepy Hollow,
east of Tripp's Run, 1 mi.
S of Falls Church

1952 *Penilla frutescens*
small colony in dooryard

Fairfax Co.

115

erect; flowers pale
pink, anthers deep purple.

Linen typed

Sept. 30 - just west of
head of Broad Creek estuary,
tributary of South River -
mixed hardwood forest
with some pine, on fine sandy
soil. alt. 25 m.

33599 *Chimaphila maculata*
common in open pine
stand, with no under-
growth, ~~the~~ layer of dried
needles 3-6 cm. thick.

33600 *Lycopodium complanatum*
abundant locally,
in places forming
ground-cover

01 *Panicum*
common along old wood
road grown up to weeds

02 *Elephantopus*
local along somewhat
shaded old wood road
grown up to weeds.

03 *Melampyrum*
common in open pine stand
with no undergrowth

04 *Elephantopus*
local in shaded old
wood road grown over by weeds

05 *Heterotheca*
common along shaded
old wood road grown over by weeds

06 *Cyperus*
rare along shaded old
wood road

Patch of open pine woods
some acres in extent, no
undergrowth, canopy thin
but complete. Father O'Neill
says was a tobacco field 25-30 years ago.

rhizomes prostrate,
white, leaves
variegated.

rhizomes on surface
of ground, leafy
branches erect,
- spikes erect.

loosely caespitose,
culms ascending,
erect

past fruiting

erect

rays bright yellow.

118

119



